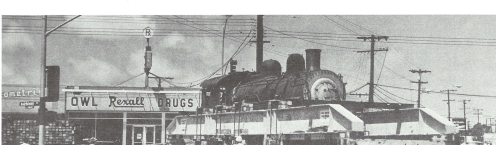
Live Steam

VOLUME ONE NUMBER SEVEN 35¢ PER COPY JULY 1967

GENE HASKLEY



ALL PHOTOS BY GENE HACKLEY

MOVING DAY AT LOMITA

by William H. Webb

Assistant Curator
Lomita Railroad Museum

Would you believe a Mogul with 64 wheels? Well, actually the locomotive only had its usual 8 wheels, but on the last run of the ex-Southern Pacific #1765 it rode on 64 rubber-tired wheels. That was because it went to the Martin S. Lewis Railroad Museum in the city of Lomita, California... and Lomita never had a full-scale railroad nor railroad track.

The locomotive and tender along with Union Pacific caboose #25730 were hauled over the city streets from the S.P. team tracks in Harbor City to the Museum tracks – a distance of about two miles, by truck, trailers, and house moving dollies. The tender and caboose were hauled up temporary ramps onto low-bed trailers, trucked to the Museum, rolled off the trailers and set in place.

The tender was a cinch. The locomotive track runs through the Museum yard from a street ending at the Museum property. The trailer was backed up to the track and the tender was rolled down a temporary ramp.

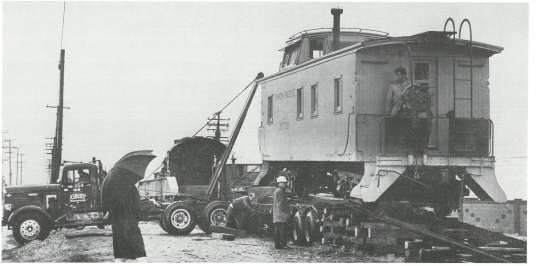
The caboose took a bit more maneuvering. Its track is parallel to a side street – about 40' long with the Museum depot on one end of the track and a neighboring garage at the other end. The problem was to get the 36' long caboose off the trailer in the street and onto the track. The solution proved to be fairly simple. The trailer was parked at an angle in the street where the ramp and temporary rails were laid straight out from the end of the trailer. The rails were laid on top of cross rails which extended over to and on top of the caboose track rails. The caboose was rolled off the trailer onto the temporary rails and chained securely to the rails. Using a winch, cable and blocks, the caboose and temporary rails were skidded across the cross rails into position over the caboose track. The caboose was jacked up, the cross rails and temporary rails and chains were removed, and the caboose was jacked down into position on the track. The fact that it was all done on a rainy, wet day didn't seem to bother the movers too much. It just took a bit longer!

The locomotive, due to its bulky weight, posed a different problem. Six solid 6 x 6 moly-steel bars were placed crossways through the frame of the locomotive. A nine-ton steel bridge girder was put on each side of the locomotive on top of the 6 x 6's and bolted in place. An 18 x 18 inch reinforced steel box timber was welded across under each end of the bridge girders, and a 10-inch I-beam stay was welded across the tops of each end of the bridge girders. Two 12 x 12 boxed steel equalizers were placed under the cross timbers and an eight-wheel dolly was put under each end of each equalizer – making four dollies under each end of the locomotive. The whole rig was about 75' long. The tongues of the second dollies on each end were bolted to the lead dollies on each end, and the tongues of the lead dollies on each end were bolted together with a tie bar which was rigged with a block and tackle for steering each end of the rig separately – making it possible to turn the locomotive around some very sharp corners. The drivers were about 25 inches above the street level to allow for the dips and street crossings along the way. It was necessary to do a bit of maneuvering in turning off the main boulevard onto a narrow side street on which cars were parked, but the movers snaked the rig around the corner and between the cars with room to spare.

The engine was towed in a cab-forward position so that as it approached the Museum track it was only necessary to build a temporary track into the street, straddle it with the dollies, jack it up, remove the rigging, lower it to the temporary track, and roll it into position on the Museum track.

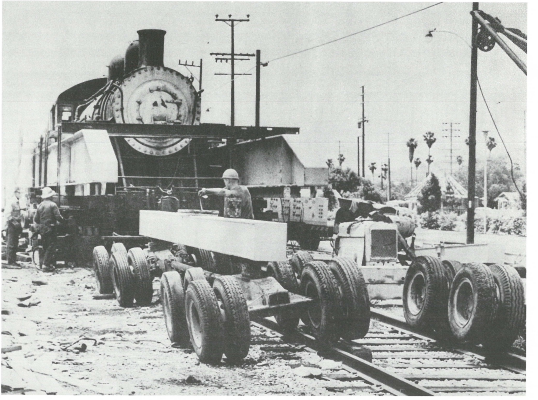
It took most of three days to get all the rigging secured around the locomotive. The engine and rigging weighed about 125 tons, and was moved, unloaded, and set in place in about ten hours. S.P. 1765 was then at its new home at the Martin S. Lewis Railroad Museum.

COVER PHOTO – Southern Pacific Mogul #1765 rests on rails in front of the museum depot at the Martin S. Lewis Museum in Lomita awaiting opening ceremonies on June 23, 24 and 25.



UNION PACIFIC CABOOSE #24730 is rolled cautiously down the ramp from the highway trailer towards its position on the display track where it will become a part of the permanent collection of railroadiana at the Museum. (Above)

SOUTHERN PACIFIC MOGUL #1765 is lowered gently onto the rails at the Museum after completing a highway trip of two miles. The dollies have been removed in preparation for dismantling the girders and beams. (Below)



Part 3

Technical Notes on Tractive Effort

by W. MARSHALL BLACK

Los Angeles Live Steamers

What constitutes average or acceptable performance from a one-inch scale model live steam locomotive? On the day you open the throttle on your newly completed first engine, all you desire is that it should move! Gradually, one becomes more demanding; some want jack rabbit speeds, some want hauling capacity (work), some want both (power), and some are content with a leisurely lap or two sans any train or load. Nevertheless, how does one recognize a truly successful model engine? Certainly, the railroads are not satisfied solely with a locomotive's beauty and/or its ability to run from roundhouse to turntable. Unfortunately, these are most often the only criteria by which we may judge our models. So for Part III of this series of technical notes, let's go for a test run. But first ask yourself these questions:

(1) What does a scale 70 MPH speed feel like in one-inch scale; i.e., is it a speed you frequently exceed or seldom attain?
(2) How big is an actual ton mile; i.e., do you often run off two or three ton miles in one continuous run?
(3) Do you often make a continuous run equivalent to, say, a prototype jaunt of 50 miles between stops at 50 MPH with an 800-ton train?

It is my contention that few members of our hobby have a good feel for these things and that we would all get more out of the hobby if we did.

The test engine, for no particular reason, happened to be S. U. No. 126, one-inch scale 2–4–4–2 Mallet. The train used included four cars: a gondola; reefer, flat and caboose. This will be treated as a five-car train since the interest is in engine performance, and to exclude the non-payload components, tender, engineer, caboose and brakeman would be untrue in model practice for obvious reasons. The test was simply this: To pick up a reasonable load and make as long a continuous run as possible – to see how many ton miles could be run up before some form of engine failure caused a termination. The performance reported here is not viewed as something marvelous, exceptional, good, bad, or indifferent. It's just an interesting set of data.

Due to the early hour, three laps of the LALS club track were required finally to enlist four LALS members (one per car) to act as live load. That is why in the following tabulations, you will find a build up in train weight reported for each of the first three laps. Pauses to add load were really not stops at all, so the run is called a continuous one. No effort was made to go fast or slow – just steady – with minimum of acceleration. The first car behind the tender was a small gondola with an ordinary spring scale built into the draft gear so as to measure train resistance from the tender back. A passenger turned this into a dynamometer car by riding there and recording drawbar pull at frequent, more or less equally spaced points around the track along with time for each lap. These extra observations were to permit some horsepower determinations.

Now a brief word about scaling. One foot converts to 12 feet in 1" scale. The conversion of pounds, weight or force into the scale equivalent must be somewhat arbitrary. For perfectly scaled models (dimensionally and construction material-wise), one pound would equal 1,728 pounds (12 cubed). In my experience, a conversion factor 1,000 is better because model practice tends to use heavier sections in frames, boiler shells, etc., and even lead weight may be added. So for weight scaling, we'll assume one pound on the model is 1,000 pounds on the prototype and do the same for tractive forces. Real time is also scale time. Thus, one lap on the 1,044 feet LALS layout is equivalent to (1,044 x 12/5,280) = 2.375 prototype miles, and an engine that weighs 175

TABLE 1

AVERAGE DRAWBAR PULL AT VARIOUS ROUTE POINTS FOR COUNTER-CLOCKWISE RUN AT 5.6 MPH, LAPS 4 THROUGH 10

	Nonaccelerating Drawbar Pull	
	Observed at Tender lbs	Estimated at Engine(1) lbs
1-inch watertank near old depot	16.4	20.5
End 1-inch grade near car barns	10.6	12.3
1½" turnout for new station	18.9	25.6
Grade crossing at entry gate	19.7	24.6
Top of grade opposite new station	25.4	31.8
Foot of grade near girder bridge	3.9	4.9
Gardner crossing on SE tangent	16.2	20.2
Trestle bridge	14.4	18.0
Turnout for 1-inch water siding	15.4	19.3
Arithmetic Average	15.7	19.6

Total live payload being hauled: 865 lbs – 5 persons (including engineer).
Train equipment weight: 235 lbs – 5 cars (including tender).
(1) 125% of observed tender value.

SOUTHERN UNION 2–4–4–2 #126, the author's 1" scale model which was used for the events described in the text of this chapter on performance.

TABLE 2

AVERAGE DRAWBAR PULL FOR ONE LAP AT SEVERAL TRAIN WEIGHTS, APPROXIMATELY CONSTANT SPEED

Consecutive Lap Numbers	Payload(1) (Live) (Incl. Engr.)		Train Weight Cars Plus Tender		Total Train Weight		Scale	Average Drawbar Pull Observed at tender		Estimated at Engine	Eng. Drawbar Pull as percent of total Train Weight
	lbs	tons	lbs	tons	lbs	tons	Tons	lbs	lbs	Scale lbs	%
1	355	0.177	235	.117	590	0.295	295	7.4	9.2	9,200	1.56
2	530	0.265	235	.117	765	0.382	382	8.0	10.0	10,000	1.31
3	755	0.377	235	.117	990	0.495	495	14.2	17.7	17,700	1.79
4–10	865	0.432	235	.117	1100	0.550	550	15.7(2)	19.6(2)	19,600	1.78

(1) Several laps were required to pickup the final liveload. Pauses to add load were of briefest possible duration; laps 4 through 10 nonstop.

(2) See Table 1for sample derivation.

TABLE 3

TON MILE ENDURANCE EVENT

Consecutive Lap Numbers	Total Train Weight		scale	Distance Run		scale	Ton Miles		
	lbs	tons	tons	ft	miles	miles	Payload Actual	Total Actual	Train scale
1	590	0.295	295	1044	0.197	2.37	0.035	0.058	699
2	765	0.382	382	1044	0.198	2.37	0.052	0.076	905
3	990	0.495	495	1044	0.198	2.37	0.075	0.098	1,173
4–10	1100	0.550	550	7308	1.384	16.61	0.508	0.761	9,136
					1.978	23.72	0.760	0.993	11,913

TABLE 4

AVERAGE HORSEPOWER DEVELOPED AT SEVERAL TRAIN WEIGHTS APPROXIMATELY CONSTANT SPEED

Consecutive Lap Numbers	Total Train Weight		scale	Distance Run		Average Drawbar Pull at Engine		Ft.-Pounds of Work Performed	sc. ft-lbs	Time Required for dist. run	Average Horsepower Developed		Avg. Speed MPH	
	lbs	tons	tons	ft	miles	lbs	scale lbs	ft-lbs	millions	min	Actual	scale	Actual	scale
1	590	295	1044	2.37	9.2	9,200	9,605	115	2.07	0.14	1685	5.7	68.7
2	765	382	1044	2.37	10.0	10,000	10,440	125	2.00	0.16	1895	5.9	71.2
3	990	495	1044	2.37	17.7	17,700	18,480	222	2.50	0.22	2690	4.7	56.8
4–10	1100	530	7308	16.61	19.6	19,600	143,200	1712	14.75	0.29	3550(1)	5.6	67.5
				23.72					21.32					

(1) Scale horsepower is very sensitive to conversion factor: model lbs to equivalent scale lbs. A factor of 1,000 was used in this note instead of theoretical factor of 1,728. A better value might have been (prototype engine weight/model weight) or (145,000 lbs/175 lbs) - 830; thus, the maximum scale horsepower would be: (19.6 x 830) (7508 x 12)/(33,000 x 14.75) - 2930 vs. 3550.

pounds is equivalent to (175 x 1,000) - 175,000 or 175,000/2,000 = 87 + tons prototype. The idea behind these rough conversions is this: Lacking data on what constitutes acceptable model performance, we can at least convert to prototype performance for comparison.

Table 1 shows actual drawbar pulls (actually these are average values for seven laps) recorded at various recognizable points around the LALS layout during a constant speed run. One thing may be surprising here: The small values per se, compared to the pull required to start this train (upwards of 40 pounds at tender). Starting pulls were the subject of Parts I and II of this technical note. This table is in effect a load profile for the layout in which wheel, gradient, curvature, (and even wind) resistance are combined. Although not revealed by the table, it should be noted that if any acceleration at all is attempted, the drawbar pull increases radically until "level off" at the new higher speed, then it drops back again. It is perhaps unexpected that the model train resistance is substantially independent of speed. At higher speed, one will be producing more horsepower because the same work is done in less time. High speed runs under load largely tax (or test) the boiler's steaming capability, how well it is matched to the running gear dimensions, your firing skill, and thus the overall ability to develop power continuously.

Table 2 shows the average drawbar pulls for one lap at four different train weights. As expected, the pull goes up as the train is loaded up; however, note in the last column that the pull as a per cent of the train weight increases only slightly and this is subject to question due to the probable data inaccuracies. As a tentative conclusion, we might venture that drawbar pull at any reasonable constant speed will be about 1.5% of the gross train weight in 1" scale. This is about twice prototype value for a comparable track configuration.

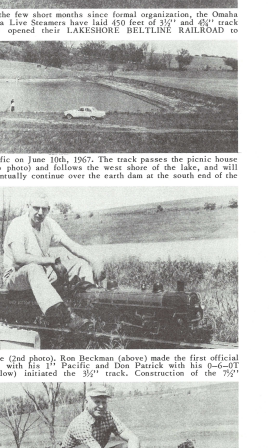
Table 3 shows the ton-mile results. The run covered 10 consecutive laps and recall that passengers were added during each of the first three laps. The run was not terminated for reason of engine failure; rather, the passengers simply could not stand any more and deserted en mass much to Mallet's disappointment. The fact that was surprising here was how much model running is involved in producing one actual ton mile. The run covered almost two actual miles (24 scale miles), with an 1,100-pound actual weight train (550 scale tons) which amounts to just under one actual ton mile or 12,000 scale ton miles. This is just a run between whistle stops in prototype practice, yet it seemed to be an Olympian event in 1" scale.

Table 4 is the horsepower data and calculation. Work is the product of a force times the distance over which it is applied. (pounds x feet). Horsepower is the rate of doing work (one HP = 33,000 ft-lbs/minute). The table shows the engine developed about 0.14 HP under the light load (two passengers on five cars, lap number one) and about 1/4 HP under the maximum load (five passengers on five cars, laps 4–10). The maximum scale horsepower was about 3,500, much too high; however, recall model train resistance may run twice as high as prototype, and the force conversion factor is somewhat arbitrary. The surprising thing here is that the run was made at a scale 60–70 MPH. It seemed like a crawl in that the actual speed was only 5–6 MPH, much slower than many of us routinely operate. This speed capability is one of the most striking divergences between model and prototype capabilities. In another test the model mallet hit 144 MPH in a flat out speed run!

Once again, this technical note is offered not to hang up a standard of performance, rather it is offered in hopes of stimulating interest in doing something more than going round and round!

OMAHA CLUB IN OPERATION!

In the few short months since formal organization, the Omaha Area Live Steamers have laid 450 feet of 3½" and 4½" track and opened their LAKESHORE BELTLINE RAILROAD to traffic on June 10th, 1967. The track passes the picnic house (top photo) and follows the west shore of the lake, and will eventually continue over the earth dam at the south end of the lake (2nd photo). Ron Beckman (above) made the first official run with his 1" Pacific and Don Patrick with his 0–6–0T (below) initiated the 3½" track. Construction of the 7½"



track will start next spring and with a hoped-for growth in membership, the rails will one day circle the entire lake. Photos and report by Donald W. Patrick.

CITY HALL FLAGS DOWN OLD #3

City of Winnipeg Hydro #3, the 1882 4–4–0 shown in LIVE STEAM for May 1967, may become a rusting pile of junk rather than the living historical exhibit envisioned by many.

The locomotive's boiler had been tested and certified, agreement had been completed to satisfaction with the Railway Brotherhoods regarding crews and the railways involved had promised free running rights. Volunteer maintenance crews had been organized, cylinder and journal lubricants donated by Imperial Oil Ltd., and there were indications of subsidies from the Tourist Department of Manitoba as well as a Winnipeg newspaper.

Old #3, unfortunately, is owned by the city of Winnipeg, and the stifling hand of politics flagged down Old #3 and decreed that she should be placed in a city park where, without adequate maintenance, she will eventually become an eyesore and carted away as junk.

It is most unfortunate that "progress" so often means the destruction of anything old...whether it be a building, a row of stately trees or a locomotive. Perhaps someday more men will realize that the obligation of public office places them on tap ...not on top...and the visions of historians will be as important as the visions of the "planners."

GROUP PLANS PURCHASE OF OLD ROTARY SNOWPLOW

During George Atchison's search last winter for a small pusher snowplow for the Cadillac & Lake City Railway, he discovered that the Northern Pacific Railroad has two steam rotary snowplows stored in Minnesota. The N. P. is about to retire these plows and is willing to sell them for their scrap value.

Plow #2 is a 62-ton coal burner and will cost $2,165.00 complete with the tender while Plow #11 is a 74-ton oil burner and will cost $2,440.00 complete with tender. The Northern Pacific agrees to clean the air brakes and to see that they are in operating condition and to repack the journal boxes so either plow can be moved on its own wheels. Moving cost is estimated at about $450.00 additional.

A group of steam railfans plans to purchase one of these plows with the idea of preserving it as a steam-era museum piece. The plows are not suitable for use on the Cadillac & Lake City (except perhaps once a year for a demonstration of the workings of a rotary under steam). While the C & LC cannot afford to put money into this equipment, it has agreed to act as a rent-free caretaker for such a piece of equipment if the group can obtain one of these plows.

The original group of four men has indicated a willingness to invest $250.00 each in a pool for the purchase of one of these plows. An invitation is being extended to others to join in this venture. The only return will be the satisfaction of helping to preserve a rare piece of steam railroad equipment and the right to climb into and work on "your" steam rotary snowplow if you desire.

If this interests you, contact Live Steamer George J. Atchison, 3803 Washington St., Midland, Michigan 48640.

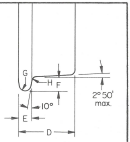
SO YOU WANT TO BUILD A LIVE STEAM LOCOMOTIVE

CHAPTER 6

by Joseph F. Nelson

Because of the activity involved in the annual Spring Meet of the Los Angeles Live Steamers (which kept that club's Vice President, Joseph F. Nelson busy) and the Spring Meet of the New Jersey Live Steamers (which took your editor away from the drawing board a few days) this month's chapter of "SO YOU WANT TO BUILD A LIVE STEAM LOCOMOTIVE" will be presented in the August issue. Mr. Nelson's descriptive drawings of JOURNALS AND BEARINGS deserve more attention than they could be given at this writing and still maintain any sort of publishing schedule.

As a case in point, we offer the following revised portion of the WHEEL AND GAUGE STANDARDS on page 8 of the June issue showing TIRE PROFILE. Note that the flange should have a 10° taper which we omitted on the published drawing.



Turn treads and flanges to their final dimensions on centers after they have been pressed on their axles; make certain that the lathe headstock runs true.

TIRE PROFILE

...from the cupola

A couple of items have crossed our desk recently that should be passed along for all of us to consider.

The first concerns the matter of correspondence generated by listings in THE EXTRA BOARD column. When we run an ad, it is with the understanding that all letters will be answered. If an item is sold, there is still an obligation to tell others so, and just a short "Sorry, Sold" with your signature on a post card is all that is necessary. This works the other way, too...when someone advertises an item for sale and is gracious enough to send out photos for your inspection, please return them without delay. They may be the only ones he has and if you aren't interested after seeing the photos, please don't jepardize his chance to sell the item to someone else. Fortunately, this does not seem to be a widespread practice but it has been called to our attention and we pass it on.

The second item is in a lighter vein and it pertains to a comment we made in this column last March. Bill Schreiber of Blue Island, Illinois, has been waging a private war against the encroachment of striped denim overalls! Bill says that in the old days all engine crews wore BLUE overalls and after a little reminiscing about our many years around railroad men, we must concur.

"...and," Bill says, "besides the nostalgic consideration there is the added benefit of being able to wear blue denims twice before they start to get stiff!"

—W. C. F.—

SCHOOL WANTED TO COMPLETE LIVE STEAM LOCO

A 3/4" scale model of B&O 7450, a Live Steam articulated engine is offered as a donation to a school that teaches classes in machine shop. One stipulation by the donor is that the school not be a public or tax-supported school.

The model is about 60% complete (the boiler is completed) and all parts, castings, prints, etc., are included so that the school could complete the model.

Mr. E. L. Harrig of 19496 Cheyenne, Detroit, Michigan 48235 started the model in 1945 and would like to see it completed as an educational project, and will give all the help necessary to get the project under way.

Anyone knowing of a school that could put this offer into reality should contact Mr. Harrig at the above address.

ORGANIZATIONAL MEET FOR MICHIGAN CLUB SCHEDULED

There will be an organizing meeting of the new club for Michigan Live Steamers on August 19th at Jack Spalding's track at 13782 Lake Drive, Monroe, Michigan.

Any Live Steamer owning or building a locomotive is invited to attend this meeting which will be called at 1:00 p.m., August 19, 1967.

For further information contact J. Bullock, G—7073 Clio Road, Mt. Morris, Michigan 48458.

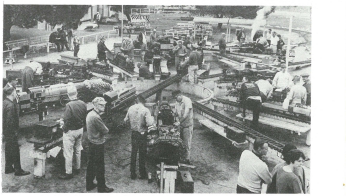
NEW LIVE STEAM CLUB FORMED IN SAN DIEGO

Formal organization into a club was completed on April 16th when a group who had been meeting informally at the track of Harry Haas for some time met to adopt by-laws and elect officers.

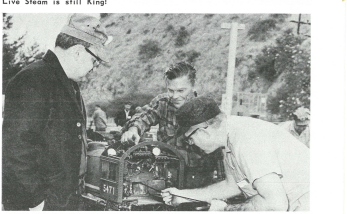
The "Jamul Valley Railroad Club" now has as its president Ace Wischstadt who is completing his 4—4—0; Vice-president and Treasurer is Ronald Morgan who has an Alco diesel A and B unit. Secretary for the new group is Charles M. Underhill (4675 Coronado Avenue, San Diego, California 92107) whose "C. P. Huntington" runs regularly at the track. Harry Haas serves as General Manager and has his Harpur mogul and a diesel switcher.

Anyone interested in joining with this new group can get more information by contacting Chuck Underhill at the above address.

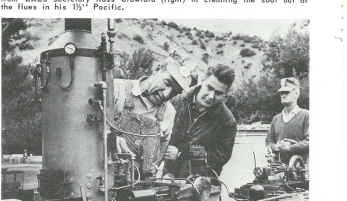
Successful Spring Meet for



1,346 steam fans passed through the registration gates and just under 5,000 persons rode the trains during the LALS Spring Meet on May 27—30! Live Steam is still King!



Gary Kubicek (left) watches as Bob Julyan (center) gets a helping hand from LALS Secretary Ross Crawford (right) in cleaning the soot out of the flues in his 1½" Pacific.

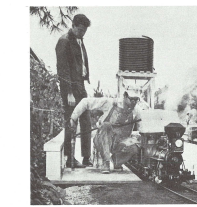


Bob Gantz and Pearson Davis check on Bob's lumber mill donkey engine which was a part of a large display of stationary engines at the meet that drew lots of attention.

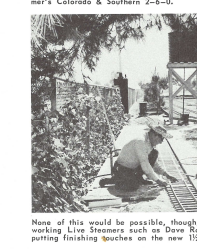
Los Angeles Live Steamers

Report and photos by Gene Hackley

Omer Milligan of Oklahoma City trucked his 1½" Atlantic to the Little Engines shop where he completed it in time for the LALS meet. Excitement shows as he sees it pop for the first time!



John Noble takes water in his 2½" scale 0-4-2 narrow gauge which runs on 7½" track while John Mueller pulls by on the main line with Bud Whitmer's Colorado & Southern 2-6-0.



None of this would be possible, though, if it were not for the many hard working Live Steamers such as Dave Rogers (left) and Buss Sutch (right) putting finishing touches on the new 1½" siding.

LEO E. YOUNG, 56, of 27781 Scott Road, Romoland, California and well known in the Live Steam circle, suffered a fatal heart attack on Sunday, May 28, 1967.

Mr. Young, who was a member of both the Riverside and Los Angeles Live Steam Clubs, was doing what made him happy . . . firing up his 1½" Atlantic in preparation for a day of hauling passengers at the Riverside Live Steamers track when the attack occured. Artificial respiration was applied to no avail.

He was very well known in the automotive repair business and had such an establishment of his own.

Survivors include the widow, Mrs. Leo E. Young of Romoland, California and a son, Kenneth, of Oroville, California as well as three brothers, two sisters and a host of friends.

No public services were held but those wishing to contribute in his memory may do so at the International Association of Cancer Victims and Friends, 5525 El Cajon Blvd., San Diego, California 92115.

15 INCH GAUGE CLUB PLANNED

The Joshua Tree & Southern Railroad Club is now being chartered by Joel Tedder, 4241 E. Live Oak Ave., C-7, Arcadia, California 91006 to build and operate a 15 inch gauge scenic railroad and tram line within the Joshua Highlands Club at Joshua Tree, California. Scheduled service will be maintained throughout the week with gas-powered models of the Galloping Goose or Skunk and steam will operate on weekends, holidays and club meets. Track would be leased on specific occasions to Live Steam Clubs, and members of the JT&S RR Club would be encouraged to leave their locomotives and equipment in storage or on display. A club car will be set up as a dormitory to house visitors overnight if one can be obtained from a railroad and space will be provided for a 7½" gauge track and yards.

Sale of an issue of real interest-bearing "Railroad Bonds" may be employed to finance the venture, and Associate Memberships will also be offered to include admission to Annual Meets.

A REPORT ON THE BLS ROSTER

The need and desire for a roster listing Live Steamers has been obvious for some time and in 1964 cards were prepared and mailed out to collect data for that purpose. During the following year many of them were returned and filed, but the work required in such a venture is tremendous and fell on the shoulders of a few who had neither the time nor equipment for its production.

Those cards which were returned have now been accepted by your editor who will complete the project.

Because of the time lapse since these cards were distributed, we must ask your cooperation in updating any changes so that the published directory will be as accurate as possible. If you have changed your address or any of the other information included on the original card, will you please let us know as soon as possible? If you did not return your card would you please send it to LIVE STEAM immediately? If you did not receive a card in the original mailing, will you please send us the information listed below so that we can include it in the directory? If you have knowledge of the death of any Live Steamer in the past four years, would you please send us that information so we can check it against the file of cards?

It is our plan to have this new directory ready for distribution in the spring of 1968 and the listings will be separated as to states and provinces. Its format will be such that it can be easily carried in a pocket or glove compartment.

It will help us considerably if this information is submitted on a post card without any other correspondence so that we can keep this file separate from other correspondence.

NAME: _____

STREET: _____ TEL. NO. _____

TOWN: _____ STATE: _____ ZIP: _____

I am a member of BLS ☐ YES ☐ NO, and OWN ☐ or have built ☐ in _____

(YEAR) a miniature live steam locomotive,

SCALE: _____, GAUGE: _____ TYPE: _____

WHEEL ARRANGEMENT: _____, DESIGNED BY: _____

_____, CASTINGS BY: _____

I have _____ feet of track, OTHER EQUIPMENT: _____

I would like other BLS members to visit by appointment: ☐ YES ☐ NO.

Belong to Steam Clubs: _____

Would you buy a $2 directory of all BLS Members ☐ YES ☐ NO

Please send names of Non-members you know on separate card.

A Quick Look Back . . . and a Long Look Ahead

It hardly seems possible that this July issue makes the twelfth edition since P. G. "Scotty" Scott turned over the LIVE STEAM NEWSLETTER to our care! Those first twelve issues have seen a growth from 8 pages to as many as 16 pages and we hope to be able to standardize on the 16-page format for the time being. The change of name from LIVE STEAM NEWSLETTER to LIVE STEAM was made with the January 1967 issue and received good response.

Our sincere thanks go out to all who have helped make this project what it is today...to Scotty for the years of groundwork and his generosity; to Linn Westcott (Editor of Model Railroader Magazine) for his most frequent mention of our efforts in the columns of MODEL RAILROADER Magazine which have introduced many to the Live Steam Hobby; to those many contributors who have provided the material for us to publish; to Joseph F. Nelson whose series of articles has given LIVE STEAM an air of authority and continuity; and to those 1,200 subscribers who have convinced us of the real need for a publication of this kind. This whole venture, though, could not be a reality if it weren't for the understanding, the encouragement and the actual labor that exceeds the classification of "help" that we receive from good wife Doris and son Paul.

What's ahead?

Prototype drawings for one thing. We have decided that Live Steamers need "Live Steam Size" drawings for their work and will publish them at a scale of 3/8" = 1'0" for clarity. We can get up to about a small Pacific on the center-spread of LIVE STEAM with our equipment, but have completed other arrangements for the printing of fold-out sheets when we need them for larger side elevations.

It looks as though we have made arrangements for a series of construction articles on a beautifully proportioned, meticulously designed ¾" scale engine that is simple enough for the beginner and intriguing enough for the experienced Live Steamer. More about that later!

Joe Nelson's series, "So You Want To Build A Live Steam Locomotive" will continue beyond the next year with the list of subjects given in the October 1966 issue and there are many more interesting articles in the files that will cover locomotive details, engineering data and general interest articles about Live Steam and Live Steamers.

If your one-year subscription started with the September 1966 issue (August 1966 was complimentary) then your subscription will expire with the August 1967 issue next month. We hope that if this is the case, you will want to send in your renewal to keep LIVE STEAM coming each month of the next publishing year. Subscriptions are still $3.50 per year in the United States and Canada and $4.50 per year (U.S. funds) in other countries.

Scheduled Meets

AUGUST

12 SOUTHERN MINNESOTA LIVE STEAMER ASSOCIATION
3½" – 4¾"
Richard M. Winkle, President
220 Friar Avenue Southwest
Rochester, Minnesota 55901

19 MICHIGAN CLUB (forming)
Organizational meeting 1:00 p.m. at
Jack Spalding's track
13766 Lake Drive
Monroe, Michigan

SEPTEMBER

2 PENNSYLVANIA LIVE STEAMERS
3 Annual Fall Meet
4 2½" – 3½" – 4¾"
Frank H. Moore, Jr., Secretary
211 Walnut Street
Wayne, Pennsylvania 19087

9 GOLDEN GATE LIVE STEAMERS
10 Annual Fall Meet
2½" – 3½" – 4¾" – 7½"
Joseph W. Bryan, Secretary
1225 Scott Street
El Cerrito, California 94530

15 NEW JERSEY LIVE STEAMERS
16 Annual Fall Meet
17 3½" – 4¾" – 7½"
Ralph Green, Secretary
845 Kilsyth Road
Elizabeth, New Jersey 07208

30 LOS ANGELES LIVE STEAMERS
1 Annual Fall Meet
W. Ross Crawford, Secretary
6900 Rayer Street
Canoga Park, California 91304

OCTOBER

12 5th ANNIVERSARY RUN
4¾" Gauge
James L. Banning
3333 Kahawelu Drive
Honolulu, Hawaii 96817

REGULAR RUN DAYS

GOLDEN GATE LIVE STEAMERS
Every Sunday, weather permitting
2½" – 3½" – 4¾" – 7½"
Joseph W. Bryan, Secretary
1225 Scott Street
El Cerrito, California 94530

LOS ANGELES LIVE STEAMERS
1st Saturday & Sunday each month
3½" – 4¾" – 7½"
W. Ross Crawford, Secretary
6900 Rayer Street
Canoga Park, California 91304

PENNSYLVANIA LIVE STEAMERS
2nd Sunday each month, May thru Oct.
2½" – 3½" – 4¾"
Frank H. Moore, Jr., Secretary
211 Walnut Street
Wayne, Pennsylvania 19087

SOUTHERN CALIFORNIA LIVE STEAM CLUB
3rd Sunday of each month
3½" – 4¾" – 7½"
K. G. Kepner, Secretary
276A Media
Rialto, California 92376

WABASH, FRISCO & PACIFIC ASSN.
Every Sunday – 12" gauge
George F. Kissel, Jr.
6347 N. Newbury Avenue
St. Louis, Missouri 63105

THE EXTRA BOARD

Items for sale or wanted to purchase by hobbyists. One free ad included with subscription, additional ads 5¢ per word with order.

WANTED

1" scale locomotive completed or partly completed. Must be within one day's drive of Philadelphia. Include phone number with reply. J. A. Develin, 147 Rose Lane, Haverford, Pa., 19041.

1941 LOCOMOTIVE CYCLOPEDIA, must be reasonably priced. Drawings for U.P. 4000 series 4-8-8-4 Big Boy, Box Pok directory, tender elevation, other details. Milling Machine (prefer vertical) in rebuildable condition. Marvin L. Weber 20731 Fargo Drive, Cupertino, Calif., 95014.

Partially completed 3½" Live Steam engine either 0-4-0, 4-6-0 or 2-6-0. Engine can be free-lance, Freinds or Little Engines. All letters answered. C. H. Morse, Jr., 10 Crommessett Road, Wareham, Mass., 02571.

Electric trains made before 1941. Will pay top cash. Also want Buddy-L push toys. Al Staufer, Route 4, Medina, Ohio, 44256.

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Yankee Shop ⅝" scale 4-4-2. Cylinders, valve gear, pistons, frame and drive wheels completed, all other castings and blue prints as well as material for copper boiler. Mrs. C. S. Templeton, 3960 South Sherman, Englewood, Colo. 80110.

1½" scale 7½" gauge 4-6-4 oil burner, 12" steel boiler, steam operated water pump and 6V generator, excellent steamer. Mrs. Raymond Teerling, 15856 Via Cordoba, San Lorenzo, California 94580 Phone 415 – 276-7768.

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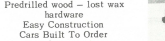

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